California Department of Boating and Waterways

Aquatic Weed Programs

The Culprits

Impacts of Aquatic Weeds

- Crowds out native plants
- Impedes water flows
- Entraps sediments
- Concentrates heavy metals
- Obstructs waterways
- Clogs water intakes for agriculture
- Impedes anadromous fish migration patterns
- Alters habitat for resident species
- Impacts dissolved oxygen/water chemistry of the water column

Mandates

- Weed Control
  - SB 1344 (1982) and AB 2193 (1997) amended the California Harbors and Navigation Code to designate DBW as lead agency for the control of Water Hyacinth and Egeria densa in the waters of the Sacramento/San Joaquin Delta, its tributaries, and Suisun Marsh.

The Delta

- Water Hyacinth Control Program consists of eleven counties
  - Alameda, Contra Costa, Fresno, Madera, Merced, Sacramento, San Joaquin, Solano, Stanislaus, Tuolumne and Yolo
- Egeria densa Control Program consists of six counties
  - Alameda, Contra Costa, Sacramento, San Joaquin, Solano, and Yolo

Regulatory Permits

- Both programs operate under the auspices of several federal and state agencies
  - Biological Opinions
    - United States Fish and Wildlife Service (USFWS)
    - National Marine Fisheries Service (NMFS)
  - National Pollution Discharge Elimination System
    - Central Valley Regional Water Quality Control Board (CVRWQCB)

Endangered Species

Water Quality Monitoring Parameters

- Temperature
- Conductivity
- Salinity
- pH
- Dissolved Oxygen
- Turbidity

Special Studies

- Mapping Invasive Species in the Delta – U.C. Davis – ongoing
- Fluridone and Diquat Sediment Accumulation – DFG – ongoing
- Monitoring Aquatic Herbicide Treatment Efficacy in the Delta – Remetrix LLC – ongoing
- Fluridone Dissipation During Typical Applications of Sonar – Dr. Lars Anderson, USDA-ARS – completed
- Acute Toxicities of Herbicides Used to Control Water Hyacinth and Brazilian Egeria of Larval Delta Smelt and Sacramento Splittail – DFG - completed

Treating *Egeria densa*

Treating Water Hyacinth